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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,667	10/31/2003	Carl Staelin	200311281-1	1031
22879 7590 04/13/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER NGUYEN, THINH H	
			ART UNIT	PAPER NUMBER
			2861	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/13/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/698,667

Applicant(s)

STAEIN ET AL.

Examiner

Thinh H. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-17 and 28-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-17 and 28-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10, 12-17, 28-36 are rejected under 35 U.S.C. § 102(e) as being anticipated by Hersch et al. (U.S. Patent Application 2005/0083540 A1)

Re claims 1, 4-7, Hersch (figs. 5,6; paragraphs 12, 133, 134, claim 58) discloses the instant claimed digital printing press comprising:

a print engine (600) for depositing ink at a thickness that is determined at least in part by developer voltage (where developer voltage is well known in the electrophotographic printing art as charged voltage difference) ; and

a processor (605) for estimating the developer voltage by applying an estimation (see prediction calibration) model to measured state parameters of the digital printing press.

Re claim 3, wherein the printing press includes a plurality of different inks, and wherein a developer voltage is estimated for each ink. (par.60, cl.58)

Re claim 4, wherein the past measurements (initial) are used to generate an estimation model; and wherein the model is applied to the current measurement (printing time) of the at least one state parameter of the digital printing press. (par.13)

Re claim 5, wherein the model is based on at least one set of past measurements of developer voltage, an ink thickness measurement, and the at least one state parameter. (par.13)

Re claim 6, 14, 15, wherein the ink thickness measurement is inferred from a measurement of optical density. (par.5, 148)

Re claim 7, 8, 9, 16, 34, 35, updating the model with additional measurements; using the estimated developer voltage to print swatches at different digital dot areas; and for each swatch measuring optical density, computing physical dot area, and adding dot area coverage to a dot gain table; wherein the dot gain table is based on past observations of the at least one state parameter of the digital printing press. (par.38, 128, 134, 135)

Re claim 10, 13, 17, 36, wherein the control parameter is developer voltage, the method further comprising applying the estimated developer voltage to a BID unit while using the BID unit to deposit ink dots. (par.12)

Re claim 28, 30, wherein a statistical learning system is used to generate the model from the past measurements. (claims 1, 58,59)

Re claim 29, 31, 32, an article comprising memory encoded with data (as shown by LUT with mapping data) for causing the processor to generate the estimation model

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of developer voltage from past measurements (initial) of developer voltage and the state parameters (printing time) of digital printing press. (claims 1, 58,59)

Pertinent Prior art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,666,615 to Nguyen (figs.1-6) and U.S. Patent 6,314,263 to Yoshida et al. (figs.15-17) shown different devices (roller, blade) being used to control ink thickness by developing charged voltage.

Response to Amendment

Applicant's amendment filed March 31, 2007 have been fully considered. However, the indicated allowability of claims 1-10, and 12-17, 28-36 are withdrawn in view of the newly discovered reference as noted in the above rejections based on the newly cited reference. Therefore, the finality of the rejection of the last Office action is hereby withdrawn.

Patent Application Information Retrieval (PAIR)

4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Contact Information

5. Any inquiry concerning this communication should be directed to examiner Thinh Nguyen at telephone number (571) 272-2257. The examiner can generally be reached Mon-Wed, and Thurs from 6:30A – 3:00P. The official fax phone number for the organization is (571) 273-8300. The examiner supervisor, Matthew Luu, can also be reached at (571) 272-7663.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-1782.



Thinh Nguyen

April 10, 2007

**Thinh Nguyen
Primary Examiner
Technology Center 2800**